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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,783

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Bertrand Lion

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EXAMINER

VENKAT, JYOTHSNA A

ART UNIT

PAPER NUMBER

1619

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,783	<b>Applicant(s)</b> LION ET AL.	
	<b>Examiner</b> JYOTHSNA A. VENKAT	<b>Art Unit</b> 1619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 72-91 is/are pending in the application.
- 4a) Of the above claim(s) 73,77,90 and 91 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 72,74-76 and 78-89 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/27/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Receipt is acknowledged of election filed on 8/21/09 and IDS filed on 6/27/06.

#### Status of claims

**Claims 1-71 are canceled.** Claims 72-91 are pending in the application.

#### *Election/Restrictions*

Applicant's election with traverse of group I in the reply filed on 8/21/09 is acknowledged. The traversal is on the ground(s) that the instant application is a national stage filing under 35 U.S.C. § 371 and thus unity of invention practice applies to the application and disagree with the Office's analysis of U.S. Patent No. 6,506,376 anticipates the present invention and the conclusion that Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1. This is not found persuasive because as explained in detail in restriction requirement dated 6/24/09, claim 1 is anticipated by U. S. patent 6,506,376 and thus unity between groups I-III is broken.

The requirement is still deemed proper and is therefore made FINAL.

Claims 90-91 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/21/09.

Receipt is also acknowledged of election of species drawn to **example 1 drawn to “non-silicone-based grafted ethylenic polymer”**. Example 1 is drawn to “non-silicone-based grafted ethylenic polymer “ and this polymer being obtained by polymerization of **methyl acrylate** and the corresponding macro monomer with a

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**polyethylene/polybutylene copolymer containing methacrylate end groups (Kraton L-1253).**

Claims 73 and 77 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/21/09.

The above claims are withdrawn since the elected species do not have silicone based macro monomer and the elected species do not have acrylic acid (see example 1).

Claims 72, 74-76 and 78-89 are currently examined in the application. Claims 72, 74-76, 78-80 and 82-89 are examined to the extent that it reads on the elected species and claim 81 is examined to the extent that it reads on the first species, which is the elected species.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 6/27/06 has been considered except for the patents that have been crossed out under "foreign patent documents". Applicants' submitted only abstracts and these abstracts have been considered since they were cited under NPL section. Additionally these foreign patents that were submitted with abstracts only are not cited under search report.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 72-76 and 78- 87 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of (U. S. Patent 6,403,106 or WO 97/35541) and WO 97/33556 ('556).

WO 97/35541 *and* U. S. Patent 6,403,106 *belong to same patent family and since* WO 97/35541 *and* U. S. Patent 6,403,106 *appear to have identical disclosures, for simplicity they will together be referred to hereinafter as "'106". While any reference hereinafter to column and line numbers will be based upon the US patent disclosure, such reference should be interpreted as including the corresponding disclosure of the aforementioned WO counterpart.*

Patent '106 under abstract teaches:

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The subject-matter of the present invention is the use, in and for the preparation of cosmetic or dermatological compositions, of a grafted copolymer, the skeleton (S) of which is composed of a hydrophilic copolymer, with a glass transition temperature  $T_g$  greater than  $25^\circ \text{C}$ ., obtained by radical polymerization or by polycondensation, comprising, on the chain of the skeleton (S), at least one graft composed of a hydrophobic macromonomer (M) with a glass transition temperature  $T_g$  of less than  $25^\circ \text{C}$ ., as well as the cosmetic or dermatological compositions employed.

**Patent under claim 14 claims that the skeleton S can be (a) at least one monomer or mixture of monomers and optionally component (b).** In view of

“optionally” patent explicitly claims that skeleton S can be one monomer.

**14.** A composition according to claim 1, wherein said skeleton (S) comprises a copolymer obtained by polycondensation of:

- (a) at least one monomer or a mixture of monomers (A') which are polycondensable; and optionally
- (b) a monomer or a mixture of monomers (B'), which are polycondensable with the monomer or monomers (A'), having at least one hydrophilic functional group, said functional group contributing solubility or dispersability in water, alcoholic media or aqueous/alcoholic media, the monomers (A') and (B') being chosen so that the phase transition temperature  $T_g$  of the skeleton (S) is greater than  $25^\circ \text{C}$ .

Patent '106 at col.4, ll 20-38 teaches:

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The monomers of the type (A) are chosen, for example, from the group consisting of:

acrylic or methacrylic esters or amides obtained from linear, branched or cyclic aliphatic alcohols and/or from aromatic alcohols, preferably  $C_1-C_6$  alcohols, such as methyl (meth)acrylate, ethyl (meth)acrylate, propyl (meth)acrylate, butyl (meth)acrylate, isobutyl (meth)acrylate, tert-butyl (meth)acrylate or tert-butylacrylamide;

vinyl, allyl or methallyl esters or amides obtained from linear, branched or cyclic aliphatic alcohols and/or from aromatic alcohols, preferably  $C_1-C_6$  alcohols, such as vinyl acetate, vinyl propionate, vinyl benzoate or vinyl tert-butylbenzoate;

olefins, such as ethylene, propylene, styrene or substituted styrene;

fluorinated or perfluorinated acrylic or vinyl monomers; their mixtures.

Thus patent explicitly teaches claimed methyl methacrylate.

Patent at col.2, ll 32-68 and col.3, ll 1-58 describes various macro monomers and at col.3, ll 20-21 explicitly teaches polyethylene/polypropylene copolymers. These copolymers are claimed in the instant application as “non-silicone based carbon-based macro monomer (claim 80, (ii)). Patent at col.6, ll 45-50 teaches the weight percent of the grafted copolymer. Patent at paragraph bridging col.s 6-7 teaches adding waxes and dyes claimed in the instant application along with synthetic oils (claimed non-silicone based organic compounds of claim 86 or non-volatile oil of claim 85). Patent at col.6, ll 14-16 teaches that the macro monomer can have reactive terminal functional group.

The difference between the patent and instant application is patent does not teach the weight percent of S and weight percent of macromer but teaches the weight percent of the grafted copolymer and patent does not teach claimed volatile oil of claim 83.

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WO '556 teaches personal compositions containing hydrophobic graft copolymer and hydrophobic volatile solvent. WO '556 under page 2, ll 29-38 teaches:

(A) a graft copolymer having a polymeric backbone and a hydrophobic polymeric side chain grafted to the backbone, said copolymer formed from the copolymerization of randomly repeating A monomer units and B macromonomer units wherein said copolymer comprises:

- (i) from about 30% to about 95% by weight of said A monomer units, wherein said A monomer units are monomer units copolymerizable with said B macromonomer units; and
- (ii) from about 5% to about 70% by weight of said B macromonomer units, wherein said B macromonomer units are hydrophobic macromonomer units having a polymeric portion and a moiety copolymerizable with said A monomer units;

The weight6 percent cited supra meets the limitation of claims 79 and 83. WO '556 at page 8, ll 11-23 teaches:

The copolymers of the present invention are formed from the copolymerization of randomly repeating A monomer and B macromonomer units, preferably wherein the A monomer units are selected from at least one polymerizable, ethylenically unsaturated monomer unit; and the B macromonomer units are selected from at least one hydrophobic macromonomer unit which contains a polymeric portion and a moiety copolymerizable with the A monomer units, preferably an ethylenically unsaturated moiety which is copolymerizable with the A monomer units. In preferred embodiments of these copolymers, the backbone is formed from the polymerization of the A monomer units with the ethylenically unsaturated portion of the hydrophobic B macromonomer unit. The polymeric portion of the B macromonomer units forms the hydrophobic side chains of the copolymer. The A monomer units and B macromonomer units can be selected from a wide variety of structures as long as the copolymer has the required properties of solubility, Tg's, and molecular weights described herein.

WO '556 explicitly teaches the macro monomer which has a polymeric chain and also a moiety copolymerizable with "A" monomer. WO '556 at page 9 describes A monomer units and at page 10, line11 describes the preferred monomers and this includes claimed methyl methacrylate.



WO '556 at page 31, line 23 through page 33, line 17 teaches various oil conditioning agents and these compounds are claimed in claim 86 under non-silicone based organic compounds. WO '556 at page 27, ll 14-21 teaches claimed non-volatile oils of claim 85 and teaches at page 16, line 14 through page 17 lines 8-9 teaches the limitation of claim 84.

Accordingly it would be obvious to one of ordinary skill in the art at the time the invention was made to prepare graft copolymers using methyl methacrylate and polypropylene/ polybutylene copolymers taught by patent '106 and use the weight percent of each monomer taught by WO '556 for the graft copolymers and use the solvent taught by WO '566 and combine with wax, dyestuff taught by patent '106 with the reasonable expectation of success that the copolymers claimed can be used as film forming agents taught by patent '106 at col.6, ll 25-30 and can be used in various personal care formulations. This is a prima facie case of obviousness.

Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of (U. S. Patent 6,403,106 or WO 97/35541) and WO 97/33556 ('556) as applied to claims 72-76 and 78- 87 and 89 above, and further in view of U. S. Patent 6,254,877 (877).

Patent '106 suggests adding was to compositions that have graft copolymers but does not teach the limitation of claim 88 having the specific weight percent of wax. Patent '877 teaches transfer-free cosmetic compositions and teaches at col.6, ll 19-27 claimed fatty phase and teaches at col.8, line 19 through col.9, line 4 graft copolymers and teaches at col.11, ll 50 -68 waxes and at col.12, ll 1-5 teaches the weight percent of wax. This meets claim 88.

Accordingly it would be obvious to one of ordinary skill in the art at the time the invention was made to prepare graft copolymers using methyl methacrylate and polypropylene/ polybutylene copolymers taught by patent '106 and use the weight percent of each monomer taught by WO '556 for the graft copolymers and use the solvent taught by WO '566 and combine with wax, dyestuff taught by patent '106 and use the weight percent for wax taught by patent '877 in analogous cosmetic compositions that use graft copolymers and fatty phase, with the reasonable expectation of success that the copolymers claimed can be used as film forming agents taught by patent '106 at col.6, ll 25-30 and can be used in various personal care formulations. This is a prima facie case of obviousness.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A. VENKAT whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Friday, 10:30-7:30:1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EYLER YVONNE (BONNIE) can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JYOTHSNA A VENKAT /  
Primary Examiner, Art Unit 1619